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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,696	10/27/2000	Christopher J. Curtin	CT-A131 US	6128

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EXAMINER

QUARTERMAN, KEVIN J

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

B)✓

Office Action Summary

Application No.

09/698,696

Applicant(s)

CURTIN ET AL.

Examiner

Kevin Quarterman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 6, 7, 10-17, 22, 26-32, 35-40, 266, 289, 310 and 319 is/are allowed.
- 6) ☒ Claim(s) 84, 97-99, 114 and 281 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-3,6,7,10-17,22,26-32,35-40,84,97-99,114,266,281,289,310 and 319.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and remarks received 07 March 2006 have been entered.
2. The indicated allowability of claims 84, 97-99, 114, and 281 is withdrawn in view of the newly discovered reference(s) to Ito (US 6,236,156). Rejections based on the newly cited reference(s) follow. The finality of the previous office action is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 84, 97-99, 114, and 281 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito (US 6,236,156).
5. Regarding independent claim 84, Figure 6 of Ito shows a structure comprising a plate (46); a group of electron-emissive elements (5) overlying the plate; a group of laterally separated control electrodes (3) for extracting electrons from the electron-emissive elements or for passing electrons emitted by the electron-emissive elements, the control electrodes overlying the plate, the electron-emissive elements being exposed through respective openings (3a) in the control electrodes; and a getter region

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(4) overlying the plate at least partially between a consecutive pair of the control electrodes.

6. Regarding claim 97, Ito discloses the getter region consisting largely of only a single atomic element (col. 5, ln. 26-32).

7. Regarding claim 98, Ito discloses the single atomic element being one of aluminum, titanium, vanadium, iron, zirconium, niobium, molybdenum, barium, tantalum, tungsten, and thorium (col. 5, ln. 26-32).

8. Regarding independent claim 99, Figure 2 of Ito shows a structure comprising a plate (112); a group of electron-emissive elements (113) overlying the plate; a group of laterally separated control electrodes (115) for extracting electrons from the electron-emissive elements or for passing electrons emitted by the electron-emissive elements, the control electrodes overlying the plate; a raised section (114) overlying the plate and extending over at least part of each control electrode; and a getter region (111) overlying the plate and exposed through or/and situated in a plurality of primary openings (not labeled) in the raised section.

9. Regarding independent claim 114, Figure 3 of Ito shows a structure comprising a plate (2); a dielectric layer (6) overlying the plate; a group of electron-emissive elements (5) overlying the plate and situated mostly in respective laterally separated openings (3a) in the dielectric layer; and a getter region (4) overlying at least part of the dielectric layer and contacting, or connected by directly underlying electrically non-insulating material to, the dielectric layer, at least part of the getter region situated above a location between a pair of the openings in the dielectric layer.

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10. Regarding claim 281, Ito discloses the getter region comprising one of aluminum, titanium, vanadium, iron, zirconium, niobium, molybdenum, barium, tantalum, tungsten, and thorium (col. 5, ln. 26-32).

Allowable Subject Matter

11. Claims 1-3, 6-7, 10-17, 22, 26-32, 35-40, 266, 289, 310, and 319 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter: The above referenced claims were previously allowed in the previous office action. The Examiner's reasons are repeated in this office action.

13. Regarding independent claim 1, the prior art of record neither shows or suggests a structure comprising, in addition to other limitations of the claim, a getter region overlying at least part of a light-blocking region and extending no more than partially laterally across a light-emissive region, and a perforated electrically non-insulating layer overlying at least part of the getter region or/and at least part of the light-emissive region. Due to their dependency upon independent claim 1, claims 2-3, 6-7, 10-17, 22, and 26-30 are also allowable.

14. Regarding independent claim 31, the prior art of record neither shows or suggests a structure comprising, in addition to other limitations of the claim, an electrically non-insulating layer overlying at least part of a light-blocking region, and a getter region overlying at least part of the non-insulating layer above at least part of the light-blocking region, an opening extending largely through the getter region generally laterally where the light-emissive region overlies a plate. Due to their dependency upon independent claim 31, claims 32, 35-40, and 266 are also allowable.

15. Regarding independent claim 289, the prior art of record neither shows or suggests a structure comprising, in addition to other limitations of the claim, a multiplicity of openings extending through a light-blocking region; a like multiplicity of laterally separated light-emissive regions overlying a plate; a getter region overlying at least part of the light-blocking region and extending no more than partially laterally across each light-emissive region; and a perforated electrically non-insulating layer overlying at least part of the getter region or/and at least part of each light-emissive region.

16. Regarding independent claim 310, the prior art of record neither shows or suggests a structure comprising, in addition to other limitations of the claim, a multiplicity of openings extending largely through a light-blocking region; a like multiplicity of laterally separated light-emissive regions overlying a plate, each light-emissive region situated at least partially in a different corresponding one of the openings in the light-blocking region; an electrically non-insulating layer overlying at least part of the light-blocking region; and a getter region overlying at least part of the non-insulating layer above the light-blocking region, a like multiplicity of openings extending largely through the getter region respectively generally laterally where the light-emissive regions overlie the plate.

17. Regarding independent claim 319, the prior art of record neither shows or suggests a structure comprising, in addition to other limitations of the claim, a multiplicity of laterally separated electron-emissive regions overlying a plate; a support region overlying the plate; and a getter region overlying at least part of the support

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region, a multiplicity of composite openings extending through the getter and support regions generally laterally where the electron-emissive regions overlie the plate, each composite opening comprising an opening through the getter region and an opening through the support region.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq 
23 March 2006


Joseph Williams
Primary Examiner
Art Unit 2879